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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,931	08/05/2003	Wayne A. Soehren	P02,0499 (H0002385)	3825

7590 03/07/2006

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EXAMINER	
ROY, ANURADHA	

ART UNIT	PAPER NUMBER
3736	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/634,931	SOEHREN ET AL.	
	Examiner	Art Unit	
	Anuradha Roy	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *December 19, 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The examiner acknowledges the response filed December 19. 2005.

Claim Objections

Objections to claims 1, 2, 5, & 6 are withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4, 5, 6, 9, 15, 16, & 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Root et al. (US Patent No. 6,013,007).

See previous office action for details of rejected claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 3 & 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Root et al. (US Patent No. 6,013,007) in view of Foxlin et al. (US Patent No. 6,162,191).

See previous office action for details of rejected claims.

Claims 8, 10, 11, 12, 13, & 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Root et al. as applied to claim 4 above, in view of Foxlin et al. (US Patent No. 6,162,191) and further in view of Vock et al. (US Patent No. 6,885,971).

See previous office action for details of rejected claims.

Additional Claim Rejections - 35 USC § 103

Claims 18 & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Root et al. in view of Teller et al. (US Publication No. 2002/0019586).

Root discloses all of the elements mentioned in the previous office action. However, Root et al. does not disclose the personal status sensor including a respiration sensor and hydration sensor. Teller et al., however, discloses a personal status sensor (10) including a respiration ([0044]) and hydration sensor ([0044]). Since one aspect of Root's invention is to provide a device to monitor a user's vital signs in order to issue warnings based on measurements as compared to the built in limits (Column 2, lines 17-20), it would have been obvious to one having ordinary skill in the art at the time of the invention to include a respiration sensor and hydration sensor, as disclosed by Teller et al., in order to obtain a more comprehensive assessment of an individual's health.

Response to Arguments

Applicant's arguments filed December 19. 2005 have been fully considered but they are not persuasive.

Applicant asserts, "...there is no description in the Root patent that the central processing unit classifies motion based on motion sensors" and that "...the Root patent does not discloses

that exercise type is based on data from motion sensors." However, the motion classification unit (central processing unit) as disclosed by Root et al. does anticipate data reception from motion sensors (GPS as shown in the previous office action) and generation of a motion type indicator signal (for example, "average speed" in Figure 11). Therefore, Root et al. anticipates both a motion sensor and motion classification unit, as claimed.

The applicant argues that, "there is no disclosure [in the Root patent] that this filtering is based on motion classification or that the filtering provides an output to both a motion classification unit and an output." Additionally, the applicant argues that the "signal interference and error purposely induced in the GPS system do not suggest filtering based on motion classification." However, as mentioned in the previous office action, Root does anticipate a filter ("special algorithm," Column 7, lines 52-56) to receive data form said motion classification unit ("central processing unit"), said filter having an output (signal from the CPU minus the "erroneous position points") connected to said motion classification unit and to said output unit ("display," 605). Therefore, Root et al. anticipates a filter, as claimed.

Applicant correctly asserts, "the Root patent does not discloses the use of a Kalman filter." As noted in the previous office action and reiterated above, Root discloses a filter ("special algorithm," Column 7, lines 52-56) connected to receive data from said motion classification unit ("central processing unit") and from said sensors ("GPS," "heart sensor," & "temperature sensors"), said filter having an output (signal from the CPU minus the "erroneous position points") connected to said motion classification unit ("central processing unit") and said energy estimator unit (within the CPU directed to Figure 11, "calories burned") said health monitor unit (within the CPU directed to Figure 11, "heart rate") so that said energy estimator

unit is operable to identify an energy expenditure ("calories burned") by the human. The filter disclosed by Root, which filters out erroneous position points anticipates the reception of data from claimed sensors (via the motion classification unit). For the reasons set forth in the previous office action, it would have been obvious to one having ordinary skill in the art at the time the invention to replace the filter disclosed by Root with a Kalman filter as taught by Foxlin, in order to "decrease the risk of error in the signal readings." Therefore, the Kalman filter is obvious in view of Foxlin.

Applicant asserts, "neither the Root patent nor the Foxlin patent discloses or suggests motion compensation based on data from inertial sensors, an altimeter, and magnetic sensors" and argues that "[it has not been] established that the Vock patent discloses or suggests motion compensation based on data from inertial sensors, an altimeter, and magnetic sensors." However, Applicant does not claim or specify "motion compensation," therefore no rebuttal can be made. As noted in the previous office action, claim 10, is unpatentable over Root et al. in view of Foxlin et al. and further in view of Vock et al.

Applicant further argues "Root patent, the Foxlin patent, and the Vock patent do not either alone or in combination disclose use of a human model." However, in the earlier sections (p.15) of the Applicant's arguments, the Applicant states, "a human model, at least in one embodiment, is a model of the relevant characteristics of the human body." Thus, the use of a human model in the Root et al. patent, Foxlin et al. patent, and Vock et al. patent is inherent.

As a final note, the Applicant is reminded that the Applicant's arguments made in large part are not in concert with the claimed language. In the claim, the applicant uses the terms "connected to," "so that," and "operable". These terms are directed to the intended use of the

filter or the Kalman filter, as examples, and have not been positively recited. The applicant should amend the claim to positively recite those limitations lacking from the prior art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anuradha Roy whose telephone number is 571-272-6169 and whose email address is anuradha.roy@uspto.gov. The examiner can normally be reached between 9:00am and 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

~AR~